



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/086,447	03/04/2002	Hideki Fukuda	2002-0328A	3193

513 7590 07/19/2007
WENDEROTH, LIND & PONACK, L.L.P.
2033 K STREET N. W.
SUITE 800
WASHINGTON, DC 20006-1021

EXAMINER

TEKLE, DANIEL T

ART UNIT	PAPER NUMBER
----------	--------------

2621

MAIL DATE	DELIVERY MODE
-----------	---------------

07/19/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/086,447

Applicant(s)

FUKUDA ET AL.

Examiner

Daniel Tekle

Art Unit

2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 April 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5-7 and 9-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3; 5-7; 9-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Response to Argument

Applicant's arguments filed April 09, 2007 have been fully considered but they are not persuasive.

Applicant argues on page 9-10 regarding to the amended claim 1 in the remark, ".....Kashiwagi fails to disclose or suggest monitoring a data size of the sub-units, wherein when the data size of the sub-units exceeds a predetermined threshold a system controller provides an instruction to an encoder to form a main unit from sub-units, as recited in independent claim 1".

In reply the examiner respectfully disagree. Kashiwagi et al. disclose monitoring a data size of the sub-unit means (**column 35 lines 34-42 for data underflow state does not occur**); system controller provides the instructions to form the main unit means (**figure 25 elements 200, 900, 1000, system controller controls the range data under or over flow occurs**). Therefore Kashiwagi et al. anticipated the limitation of independent claim 1 as noted above.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the

Art Unit: 2621

applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3, 5-7 and ⁹⁻¹⁶~~8-16~~ are rejected under 35 U.S.C. 102(e) as being

anticipated by Kashiwagi et al (US 6393574).

Regarding claim 1: Kashiwagi et al. discloses a recording apparatus for recording onto a recording medium, a compressed stream obtained by compressively encoding a broadcast audio/video signal recording apparatus including:

an encoder operable to (i) receive the broadcast audio/video signal (ii) generate the compressed stream having a main unit from the received broadcast audio/video signal, (iii) divide the compressed stream into a plurality of sub-units according to a predetermined time range, (iv) form, according to an instruction, the main unit from a determined portion of the plurality of sub-units, (v) output the compressed stream having the main unit formed from the determined portion of sub-units, and (vi) create sub-unit attribute information corresponding to each sub-unit which forms the main unit;

a recording buffer memory operable to store the compressed stream having the main unit formed from the determined portion of sub-units; a recorder operable to record the compressed stream stored in recording buffer memory, on onto the recording medium;

and a system controller operable to (i) control encoder, recording buffer memory, and recorder, (ii) generate management information for each sub-unit of which encoder created sub-unit attribute information, (iii) insert the management information into a predetermined position-in of the main unit, (iv) monitor a data size of the sub-units stored in recording buffer memory, and (v) provide, based on the data size, the

instruction according to which encoder forms the main unit, wherein: when the data size of the sub-units stored in recording buffer memory exceeds a predetermined threshold, system controller provides the instruction to form the main unit; and recorder is operable to read the compressed stream successively from recording buffer memory when the sub-unit management information has been inserted into the predetermined position of the main unit by system controller, and record the compressed stream, read from recording buffer memory, stream on onto the recording medium (columns 8-9 lines 56-14; column 35 lines 34-42 and figure 25).

Regarding claim 2: Kashiwagi et al. discloses a recording apparatus of Claim 1, wherein encoder is operable to encode the broadcast audio/video signal using variable-rate controlled compression method (column 2 lines 44-52).

Regarding claim 3: Kashiwagi et al. discloses a recording apparatus of Claim 1 wherein: system controller is operable to monitor a number of main units formed by said encoder according to the instruction from said system controller; maximum number of main units constituting the compressed stream is a predetermined number; and when the number of main units constituting the compressed stream reaches the maximum number of main units, recorder is operable to stop recording (column 22 lines 44-52 and column 35 lines 34-42).

Regarding claim 5: Kashiwagi et al. discloses a recording apparatus of Claim 1: wherein: said system controller is operable to form a main unit set from a group of the main unit and a maximum number main constituting the main unit set a predetermined number; and when the number of he main units constituting the compressed stream

reaches the maximum number of main units predetermined value n, the main unit set is formed from a group comprising the maximum number of main units, formation of another main unit set is initiated **(column 36 lines 14-31)**.

Regarding claim 6: Kashiwagi et al. discloses a recording apparatus of Claim 3 wherein a memory size of the recording buffer memory is defined by a recording capacity of the recording medium and the predetermined value **(column 22 lines 44-52 and column 2 lines 22-29)**.

Regarding claim 7: Kashiwagi et al. discloses a recording apparatus of Claim 3, wherein a memory size of recording buffer memory is defined by a size of data to be recorded and the predetermined number **(column 22 lines 44-52)**.

Regarding claim 9: Kashiwagi et al. discloses a recording apparatus of claim 1 wherein the predetermined threshold is defined by a memory size of recording buffer memory **(column 8 lines 4-7 and column 24 lines 44-52)**.

Regarding claim 10: Kashiwagi et al. discloses a recording apparatus of claim 1, wherein maximum number of main units constituting the compressed stream is set at a predetermined number; and the predetermined threshold is defined by a recording capacity of the recording medium and the maximum number of main units **(column 2 lines 22-29 and column 29 lines 1-6)**.

Regarding claim 11: Kashiwagi et al. discloses the recording apparatus of claim 1 wherein: a maximum number of main units constituting the compressed stream is set at a predetermined number; and the predetermined threshold is defined by a size of data to be recorded and the maximum number of main units **(column 36 lines 14-31)**.

Regarding claim 12: Kashiwagi et al. discloses a recording apparatus of Claim 1: wherein encoder is operable to utilize at least one information from information concerning a data size of each sub-unit which forms the main unit, information concerning a position of each sub-unit which forms the main unit, and information concerning a playback time of each sub-unit which forms the main unit, as the sub-unit attribute information **(column 27 lines 45-54).**

Regarding claim 13: Kashiwagi et al. discloses a recording apparatus of Claim 1, wherein when system controller inserts the sub-unit management information into the main unit the sub-unit management information is placed at a head of each sub-unit comprising the main unit **(column 36 lines 6-31).**

Regarding claim 14: Kashiwagi et al. discloses a recording apparatus of Claim 1, further comprising a unit operable to issue a recording stop command and a recording start command, wherein: system controller is operable to post a coding stop instruction to encoder when the recording stop command is issued by unit; and encoder is operable to finish forming the main unit upon receiving the coding stop instruction from system controller, and a the sub unit is being formed at a time when the coding stop instruction is received by encoder a last sub-unit to be encoded by encoder **(column 73 lines 47-58).**

Regarding claim 15: Kashiwagi et al. discloses recording apparatus of Claim 1, further comprising a decision operable to determine type of the recording medium, wherein: and system controller is operable to, insert the sub-unit management information-in into a predetermined position in the main unit and control recorder for

recording to record the sub-unit management information onto a sub-unit management area on the recording medium; and said system controller is operable to either insert the sub-unit management information or control said recorder to record the sub-unit management information according to the determination of said decision unit (column 29 lines 1-6 and figure 25).

Regarding Claim 16: Claim 16 is rejected for the same subject matter as claim 1.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel Tekle whose telephone number is 571-270-1117. The examiner can normally be reached on 7:30am to 5:00pm M-R and 7:30-4:00 Every other F..

Art Unit: 2621

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Tran can be reached on 571-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Daniel Tekle


THAI O. TRAN
SUPERVISOR, PATENT EXAMINER
EBC CENTER 2621